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10/738,490	12/17/2003	Toru Kuchimaru	12062-4	7834

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EXAMINER	
DANIELS, ANTHONY J	
ART UNIT	PAPER NUMBER
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/738,490	KUCHIMARU, TORU	
	Examiner	Art Unit	
	Anthony J. Daniels	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment, filed 10/16/2007, has been entered and made of record. Claims 1-23 are pending in the application.

2. The amendment to claim 19 has overcome the examiner's objection.

Response to Arguments

1. Applicant's arguments regarding claim 19 and the Suh reference have been fully considered but they are not persuasive.

Applicant argues, "...Suh is electrically actuated, and is not adapted for manual operation. Suh does not teach or disclose a lever of any kind suitable for manual actuation, and manual operation is not disclosed. The element of a lever is completely missing in Suh." The examiner respectfully disagrees with this contention. Figure 6 clearly shows a lever "43d" located on the ring with grooves "43e" that is used in conjunction with the power gear assembly to move the lens system. Although Suh is indeed an electrically operated system, manual actuation is inherent to the lever. More specifically, the drive unit of Suh is ultimately a mechanical one that is operated by an electrical source. The drive unit, including the lever, is manually operable.

2. Applicant's arguments regarding claim 1 and the Suh in view of Kanno rejection have been fully considered but they are not persuasive.

Applicant argues, "...the detector for detecting rotation in Kanno, which the Examiner argues provides the missing element, is very different than applicant's detector for detecting the position of the optical unit with respect to the optical axis. Because the Kanno lens is purely a manually actuated assembly, an encoder detects an amount of rotation of the cam barrel (Col. 10, lines 44-55). A detector or encoder configured to detect rotation, such as the Kanno detector, is a very different structure than a detector that detects the position of the optical unit with respect to the optical axis, even if they happen to be referred to by the same name, such as a "detector."" The examiner believes that Applicant has misinterpreted what Kanno's detector is. In the cited paragraph, Kanno discloses that an encoder that detects rotation of the barrel would be complicated and instead, discloses that the zoom position is determined by a moving amount, in an optical axis direction, of a lens group (see Col. 10, Lines 43-54, *"...since the cam barrel moves in the optical axis direction while rotating about the optical axis, an encoder for detecting the rotation amount of the cam barrel is complicated. When the moving amount, in the optical axis direction, of the first lens group frame serving as an operation end in the zooming operation, is to be detected, since the moving amount of the first lens group frame is large, the encoder must have a large length and the size of the lens barrel undesirably increases. Thus, in the present invention, the zoom position is detected by detecting the moving amount, in the optical axis direction, of the Xth lens group frame..."*). The examiner further submits that the detector in Kanno may not be identical in structure, but it is the same in function. Thus, the examiner submits that the detector in claim 1 has been given its broadest reasonable interpretation.

Applicant further argues, "What would such a combined lens assembly look like? It would contain the basic motorized zoom lens of Suh, but would further have some form of "detector" to detect rotation. However, the barrel of Suh does not rotate. Rather, the gears cause it to move along the axis. Accordingly, adding the rotation detector of Kanno does not provide a functional device." The examiner submits that the detector of Kanno does not detect rotation as stated above and; thus, this argument is deemed moot.

The examiner believes all arguments have been addressed.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 20 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 19 recites a lever, which is supported by the specification. However, claims 20 and 21 recite an actuating lever implying that there is more than one lever, which is not supported by the specification. For the purposes of art rejection, the examiner assumes that the lever recited in claim 19 is the same lever (the actuating lever) recited in claims 20 and 21.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Suh (US 2003/0219244).

As to claim **19**, Suh teaches an imaging device (Figure 2, zoom lens assembly "3") comprising: an imaging unit having a photoelectric converter for converting an optical image into electric signal (Figure 2, CMOS module assembly "7"); an optical unit for forming an optical image of a subject on the photoelectric converter (Figure 2, lens assemblies "13" and "15"); and a drive unit (Figure 5, power gear assembly "11", step motor gear "21" and step motor "9") for manually actuating at least part of the optical unit in an optical axis direction ([0062]) by use of a lever (Figure 6, lever "43d"; *{Manually actuating the lever would move the ring with grooves "43e", which would move the lens system. See paragraphs [0052] – [0055] and the arguments above.}*), wherein the lever of the drive unit is provided in a projected area of the imaging unit in the optical axis direction (Figure 6; *{The projected area is interpreted to be the area of the CMOS module assembly in light of Figure 1 of this specification.}*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-3,5-8,10-12,14-18,22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suh (US 2003/0219244) in view of Kanno (US # 5,712,734).

As to claim **1**, Suh teaches an imaging device (Figure 2, zoom lens assembly "3") comprising: an imaging unit having a photoelectric converter for converting an optical image into electric signal (Figure 2, CMOS module assembly "7"); an optical unit for forming an optical image of a subject on the photoelectric converter (Figure 2, lens assemblies "13" and "15"); a drive unit for (Figure 5, power gear assembly "11", step motor gear "21" and step motor "9") actuating at least part of the optical unit in an optical axis direction ([0062]), wherein both the drive unit **and the optical unit** is provided in a projected area of the imaging unit in the optical axis direction (Figure 5; *{The projected area is interpreted to be the area of the CMOS module assembly in light of Figure 1 of this specification.}*). The claim differs from Suh in that it further requires a detector for detecting a position of at least part of the optical unit with respect to the optical axis direction.

In the same field of endeavor, Kanno teaches a **zoom lens barrel comprising**: a zoom lens position detector for detecting a position of a zoom lens in an optical axis direction (Col. 10, Lines 36-58; Claim 10, Lines 1 and 2). In light of the teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include **the position detector in the lens barrel of Suh**, because an artisan of ordinary skill in the art would

recognize that this would the camera to effectively know when the lens is at a desired position (telephoto or wide-angle).

Remarks about the rejection of claim 1: The detector of Kanno is located in the zoom lens barrel. When Kanno is combined with Suh, the optical unit of Suh, which is positioned in a projected area of the imaging unit, would include the detector. Thus, the detector would be positioned in a projected area of the imaging unit.

As to claim **2**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 1, wherein the optical unit is provided in the projected area of the imaging unit in the optical axis direction (see Suh, Figure 2).

As to claim **3**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 1, wherein the imaging unit has a rectangular shape (see Suh, Figure 2), and wherein at least either of the drive unit and the detector is provided on corners of the rectangular shape (see Suh, Figure 3, motor "9" in corner).

As to claim **5**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 1, wherein the optical unit comprises: a lens (see Suh, Figure 14, lens "48"); and a lens frame which supports the lens (see Suh, Figure 2, lens assemblies "13" and "15"); and wherein the imaging device further comprises: a chassis (see Suh, Figure 2, zoom base "5" and cover "31") having a hanger shaft by which the lens frame is supported so as to be capable of moving in the optical axis direction (see Suh, Figure 8, unnumbered shaft; Figure 2).

As to claim **6**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 5, wherein the hanger shaft is provided in the projected area of the imaging unit in the optical axis direction (see Suh, Figure 2; Figure 8).

As to claim **7**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 5, wherein the imaging unit has a rectangular shape (see Suh, Figure 2), and wherein the hanger shaft is provided on a corner of the rectangular shape (see Suh, Figure 2; Figure 8).

As to claim **8**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 7, wherein the detector is provided on a corner of the imaging unit opposite to the hanger shaft with respect to the optical axis (see Suh, Figure 2, lens assembly provided opposite to unnumbered shaft).

As to claim **10**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 5, wherein the drive unit comprises: a motor having a drive shaft parallel to the optical axis of the optical unit (see Suh, Figure 2, rotational shaft "17"); and a conversion mechanism (see Suh, Figure 2, power gear assembly "11") for converting a rotational motion of the drive shaft into a linear motion in the optical axis direction (see Suh, [0062]). Although it is not stated explicitly, **Official Notice** is taken that the concept of providing a motor drive shaft for a focal or zoom lens that is perpendicular to the optical axis of an imaging device is well known and expected in the art. One of ordinary skill in the art would have been motivated to do this, because this can provide compact space by implementation above or below the lens barrel.

As to claim **11**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 10, wherein the conversion mechanism comprises: a driving gear provided on the drive shaft of the motor (see Suh, Figure 5, step motor gear "21"); and a cam gear meshing with the driving gear (see Suh, Figure 5, fifth gear "41"; [0047]), having a cam surface with which a cam follower formed on an extension of the optical unit is in pressure contact (see Suh, Figure 5, gear spikes in contact with fifth gear extending from lens cam "43"), and having a shaft parallel to the

optical axis of the optical unit (see Suh, Figure 2; Figure 5), and wherein at least part of the cam gear is provided in the projected area of the imaging unit in the optical axis direction (see Suh, Figure 5).

As to claim **12**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 5, wherein the imaging unit has a rectangular shape (see Suh, Figure 5), and wherein the chassis has a substantially oblong shape (see Suh, Figure 5), one side of which has a substantially same length as that of the imaging unit (see Suh, Figure 2).

As to claim **14**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 1, wherein the optical unit comprises: a lens (Figure 14, lens "48"); an inner barrel holding the lens (Figure 14, first lens holder "47"); and an outer barrel (Figure 14, everything outside the first lens holder) meshing with outside of the inner barrel through a screw coupling ([0057], Lines 1-3). Although it is not stated explicitly in Suh, **Official Notice** is taken that the concept of providing helicoids screws in attachment situations is well known and expected in the art. One of ordinary skill in the art would have been motivated to do this, because helicoids screws provide effective ways for attaching two objects.

As to claim **15**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 14, wherein the drive unit comprises: a motor (Figure 3, step motor "9") having a drive shaft parallel to the optical axis of the optical unit (Figure 3); a driving gear provided on the drive shaft of the motor (Figure 5, step motor gear "21"); and an intermediate gear that meshes with the driving gear (Figure 5, fifth gear "41") and that meshes with a gear formed on an outer circumferential surface of the outer barrel of the optical unit (Figure 5, gear spikes in contact with fifth gear extending from lens cam "43"), and wherein at least part of the intermediate gear

is provided in the projected area of the imaging unit in the optical axis direction (see Suh, Figure 5).

As to claim **16**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 14, wherein the drive unit comprises: a motor (Figure 3, step motor "9") having a drive shaft parallel to the optical axis of the optical unit (Figure 3); and a driving gear that is provided on the drive shaft of the motor (Figure 5, step motor gear "21") and that meshes with a gear formed on an outer circumferential surface of the outer barrel of the optical unit (Figure 5, gear spikes of lens cam "43"), and wherein at least either of the motor and the driving gear are provided in the projected area of the imaging unit in the optical axis direction (see Suh, Figure 5). Although it is not stated explicitly, **Official Notice** is taken that the concept of providing a motor drive shaft for a focal or zoom lens that is perpendicular to the optical axis of an imaging device is well known and expected in the art. One of ordinary skill in the art would have been motivated to do this, because this can provide compact space by implementation above or below the lens barrel.

As to claim **17**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 1, wherein the detector is provided so as to adjoin the drive unit (see Suh, Figure 2, both are adjoined on the zoom base), and wherein output terminals of the detector and feeder terminals of the drive unit protrude in the same direction (see Suh, Figure 2).

As to claim **18**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 1, wherein the hanger shaft is positioned on a bisector line that bisects the imaging unit up and down or left and right, and wherein the drive unit and the detector are positioned on

opposite sides with respect to the bisector line (*The examiner interprets the bisector line as the line separating the detector and the drive unit. The line would inherently bisect the drive unit and the detector.*).

As to claim **22**, Suh, as modified by Kanno, teaches portable equipment comprising the imaging device as claimed in claim 1 (see Suh, Figure 1, mobile phone "1"; [0037]).

As to claim **23**, Suh, as modified by Kanno, teaches portable equipment as claimed in claim 22, wherein the optical unit comprises: a lens (see Suh, Figure 14, lens "48"); and a lens frame which supports the lens (see Suh, Figure 2, lens assemblies "13" and "15"); and wherein the imaging device further comprises: a chassis (see Suh, Figure 2, zoom base "5" and cover "31") having a hanger shaft by which the lens frame is supported so as to be capable of moving in the optical axis direction (see Suh, Figure 8, unnumbered shaft; Figure 2), and wherein the hanger shaft is provided on a corner of the rectangular shape (see Suh, Figure 2).

2. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suh (US 2003/0219244) in view of Kanno (US # 5,712,734) and further in view of NPL – Fossum et al. (IEEE Article).

As to claim **4**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 1, wherein at least either of the drive unit and the detector are provided opposite to a position of the photoelectric converter (see Suh, Figure 2; *{The drive unit is provided vertically opposite to the imaging unit.}*). The claim differs from Suh, as modified by Kanno, in that it further requires that the photoelectric converter of the imaging unit be positioned so as to be offset from a center of the imaging unit.

In the same field of endeavor, Fossum teaches a CMOS module having pixels offset from the center of the module (p. 1693, Fig. 7). In light of the teaching of Fossum, it would have been obvious to include the CMOS imager as described by Fossum in that system of Suh, because an artisan of ordinary skill in the art would recognize that this would allow for a miniaturized low-power, cost effective imaging unit (see Fossum, p. 1689, Col. 2, Lines 2-15)

As to claim **9**, Suh, as modified by Kanno and Fossum, teaches an imaging device as claimed in claim 5, wherein the photoelectric converter of the imaging unit is positioned so as to be offset from a center of the imaging unit (see Fossum, p. 1693, Fig. 7), and wherein the hanger shaft is provided opposite to the offset position of the photoelectric converter (see Suh, Figure 2; *{The hanger shaft is provided vertically opposite to the imaging unit.}*).

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suh (US 2003/0219244) in view of Kanno (US # 5,712,734) and further in view of Takachi (US 2003/0137595).

As to claim **13**, Suh, as modified by Kanno, teaches an imaging device as claimed in claim 12. The claim differs from Suh, as modified by Kanno, in that it further requires that the imaging device include a cover which covers the front face of the imaging device and has an aperture for directing light from the subject to the optical unit, and wherein the chassis comprises a pair of elastic pieces having hooks at extremities thereof, and wherein the hooks of the pair of elastic pieces engage with the cover so that the cover is fixed on the chassis.

In the same field of endeavor, Takachi teaches an image pickup device having a package (cover) for the image sensor (Figure 2, package "3"). The package is provided on a front face of

the device and having aperture for directing incident light (Figure 2). An elastic pair of hooks is provided on the package so as to fix the package to the sensor (Figure 2, elastic claws "16"; [0029]). In light of the teaching of Takachi, it would have been obvious to one of ordinary skill in the art to include the elastic hooks connected to a package on the CMOS module of Suh, because an artisan of ordinary skill in the art would recognize that this would allow for a prevention of dust and other particles from resting on the photoelectric converters.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suh (US 2003/0219244).

As to claim **20**, Suh teaches an imaging device as claimed in claim 19, wherein the optical unit comprises: a lens (Figure 14, lens "48"); an inner barrel holding the lens (Figure 14, first lens holder "47"); and an outer barrel (Figure 14, everything outside the first lens holder) meshing with outside of the inner barrel through a screw coupling ([0057], Lines 1-3), wherein the drive unit comprises an actuating lever extending from the outer barrel or the inner barrel, and wherein the actuating lever is provided in the projected area of the imaging unit in the optical axis direction (see Suh, Figure 6, lever "43d"). Although it is not stated explicitly in Suh, **Official Notice** is taken that the concept of providing helicoid screws in attachment situations is well known and expected in the art. One of ordinary skill in the art would have been motivated to do this, because helicoids screws provide effective ways for attaching two objects.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suh (US 2003/0219244) in view of the Japanese Publication to Tsuzuki (JP 2001-033686 A).

As to claim **21**, Suh teaches an imaging device as claimed in claim 19, wherein the optical unit comprises: a lens (Figure 14, lens "48"); a lens frame that holds the lens and that is supported so as to be capable of moving in the optical axis direction ([0062]), and wherein the drive unit comprises: a ring having cam pieces that coincide with cam grooves formed on the lens frame (see Suh, Figure 5, cam "43"), the ring capable of rotating about the optical axis ([0062]); and an actuating lever extending from the ring (see Suh, Figure 6, lever "43d"), and wherein the actuating lever is provided in the projected area of the imaging unit in the optical axis direction (see Suh, Figure 6). The claim differs from Suh in that it further requires a spring for biasing the lens frame in the optical axis direction.

In the same field of endeavor, Tsuzuki teaches an imaging system comprising a coil spring biasing a lens frame and a fixing member (Solution). In light of the teaching of Tsuzuki, it would have been obvious to include the spring to bias the lens frame of Suh, because an artisan of ordinary skill in the art would recognize that this would conduct energization (see Tsuzuki, Solution).

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Daniels whose telephone number is (571) 272-7362. The examiner can normally be reached on 8:00 A.M. - 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AD
1/2/2007

LIN YE
SUPERVISORY PATENT EXAMINER